

What is claimed is:

1. (Amended) A gateway device which interconnects two communication buses implemented with different communication methods, and in which information to be communicated is made up of a header field containing information such as an address necessary for communication and a message field containing information to be used at receiving side after the communication based on said header field is completed, said gateway device comprising:

judging means for judging, based on contents of said message field, whether or not the information received from one communication bus is information that should be transmitted to the other communication bus; and

filtering means for transmitting said received information to said other communication bus when said received information is judged by said judging means to be the information that should be transmitted.

2. (Amended) A gateway device which interconnects two communication buses implemented with different communication methods, and in which information to be communicated is made up of a header field containing information such as an address necessary for communication and a message field containing a command and a parameter accompanying said command, said gateway device comprising:

judging means for judging, based on said command, whether or not the information received from one communication bus is information that should be transmitted to the other communication bus; and

filtering means for transmitting said received information to said other communication bus when said received information is judged by said judging means to be the information that should be transmitted.

3. (Amended) A gateway device which interconnects two communication buses implemented with different

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communication methods, comprising:

judging means for judging whether or not  
information received from one communication bus is  
information that should be transmitted to the other  
communication bus;

storage means for storing the information  
that is judged by said judging means to be the  
information that should be transmitted; and

filtering means for comparing the  
information stored in said storage means with newly  
received information which is of the same kind as said  
stored information and is judged by said judging means to  
be the information that should be transmitted and, when  
their contents differ, transmitting said received  
information to said other communication bus while, at the  
same time, storing said received information in said  
storage means.

4. A gateway device as claimed in claim 3, further  
comprising:

means for transmitting the information  
stored in said storage means to said communication bus in  
accordance with a request made from said communication  
bus.

5. A gateway device as claimed in any one of

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claims 1 to 4, wherein said gateway device interconnects two communication buses in an automobile.

6. (Amended) A method of gatewaying in a gateway device which interconnects two communication buses  
5 implemented with different communication methods, and in which information to be communicated is made up of a header field containing information such as an address necessary for communication and a message field containing information to be used at receiving side after  
10 the communication based on said header field is completed, said method of gatewaying comprising the steps of:

(a) judging, based on contents of the message field of said communication data, whether or not the  
15 information received from one communication bus is the information that should be transmitted to the other communication bus; and

(b) performing filtering to transmit said received information to said other communication bus when  
20 in said step (a) said received information is judged to be the information that should be transmitted.

7. (Amended) A method of gatewaying in a gateway device which interconnects two communication buses  
25 implemented with different communication methods, and in which information to be communicated is made up of a header field containing information such as an address necessary for communication and a message field containing a command and a parameter accompanying said command, said method of gatewaying comprising the steps  
30 of:

(a) judging, based on the command contained in the message field of said communication data, whether or not the information received from one communication bus is the information that should be transmitted to the  
35 other communication bus; and

(b) performing filtering to transmit said

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received information to said other communication bus when in said step (a) said received information is judged to be the information that should be transmitted.

5 8. (Amended) A method of gatewaying in a gateway device which interconnects two communication buses implemented with different communication methods, comprising the steps of:

10 (a) judging whether or not information received from one communication bus is information that should be transmitted to the other communication bus;

(b) storing the information that is judged in said step (a) to be the information that should be transmitted; and

15 (c) performing filtering whereby the information stored in said step (b) is compared with newly received information which is of the same kind as said stored information and is judged in said step (a) to be the information that should be transmitted and, when their contents differ, said received information is

20 transmitted to said other communication bus while, at the same time, storing said received information in said step (b).

9. (Amended) A method of gatewaying as claimed in claim 8, further comprising the step of:

25 (d) transmitting the information stored in said step (b) to said communication bus in accordance with a request made from said communication bus.

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